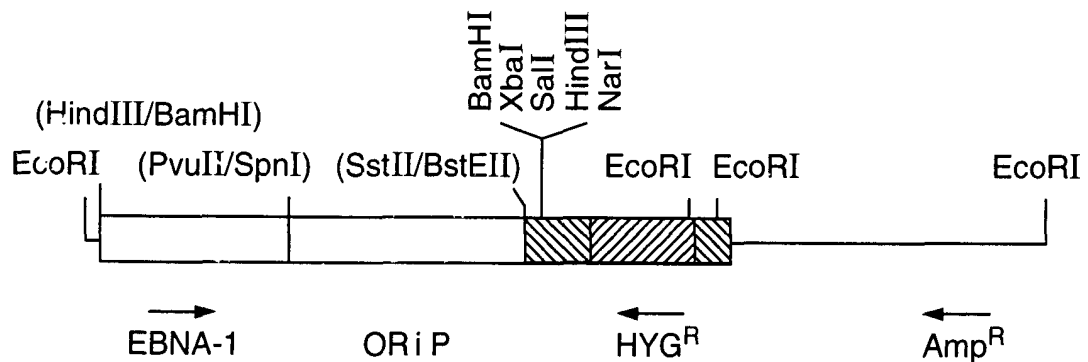


FIG. 1



| | | |
|-----------|---|---|
| bp | | |
| 1-35 | — | pBR322 |
| 36-2646 | □ | EBV EBNA-1 107567-110176 (Baer et. al., Nature 310:1984) Bam HI-PvuII fragment. Bam HI site was blunt-end ligated to the HindIII site. |
| 2647-4826 | □ | EBV OriP 7333-9516 SphI-SstII sites blunt-end ligated to the BstEII site. (Sugden et. al., MCB 5:410, 1985) |
| 4827-5460 | ▨ | HSV TK regulatory region (McKnight, S.L., Nucleic Acids Res. 8, 5949, 1980) |
| 6488-6747 | ▨ | PvuII fragment ligated into the poisonless pBR322 at NaeI site. These sites lost in cloning. |
| 5461-6487 | ▨ | HPH gene (Gritz and Davies, Gene 25:179, 1983) Ban HI fragment blunt-end ligated into the SmaI and BglII sites in HSV TK sequences. |
| 6748-8952 | — | pBR322 poisonless vector (deletion of 1.1 kb in pBR322) confers ampicillin resistance. (Lusky & Botchan, Nature 293:79, 1981) |

Application No.: 09/247,054
 Title: Self-Replicating Episomal Expression Vectors Conferring
 Tissue-Specific Gene Expression
 Inventors: Michael Antoniou and Franklin G. Grosfeld
 Docket No. CACO-0045 Date of Filing: February 9, 1999
 Atty: Doreen Yatko Trujillo Telephone No. (215) 568-3100

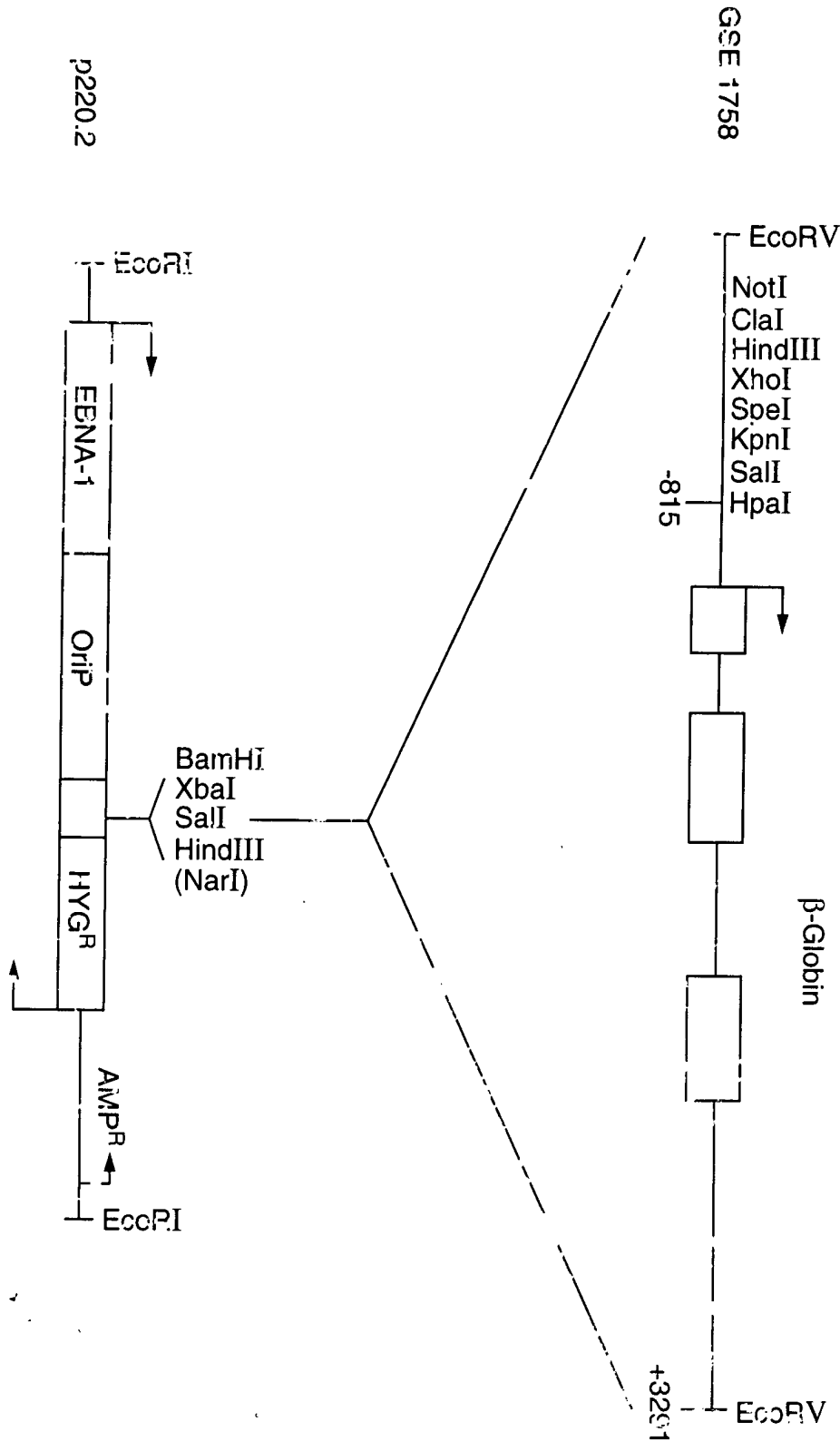


FIG. 2

FIG. 3

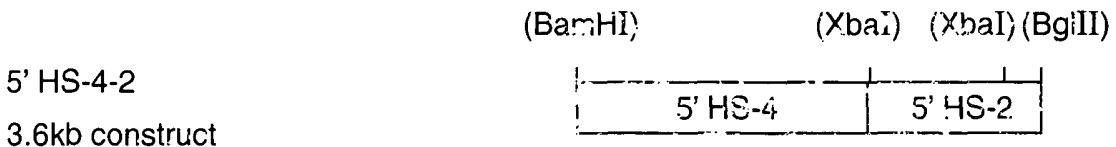
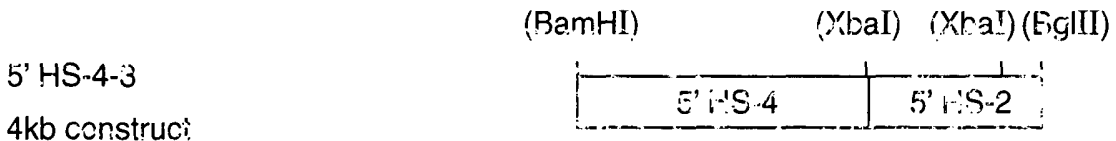
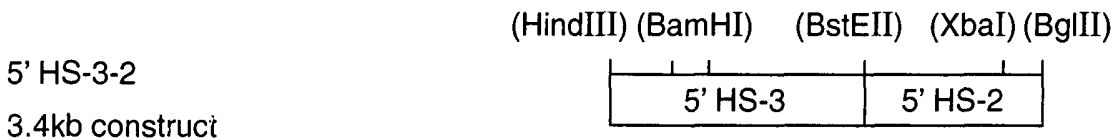
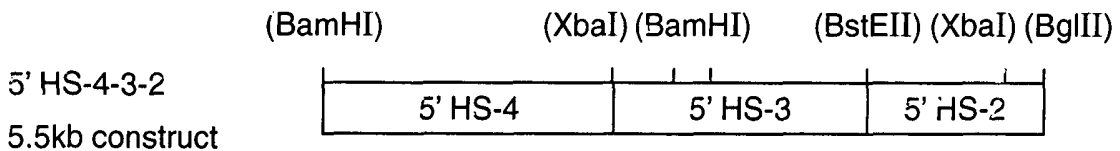
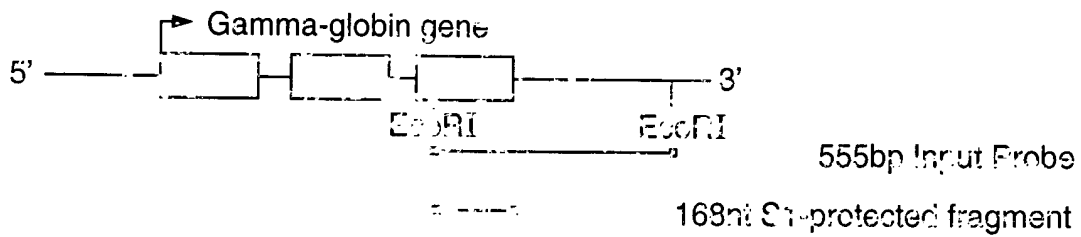
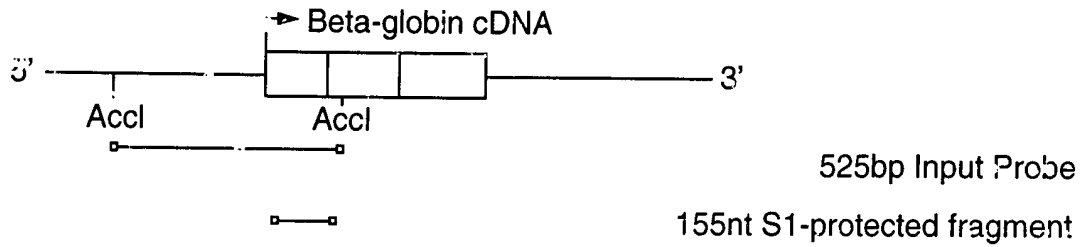
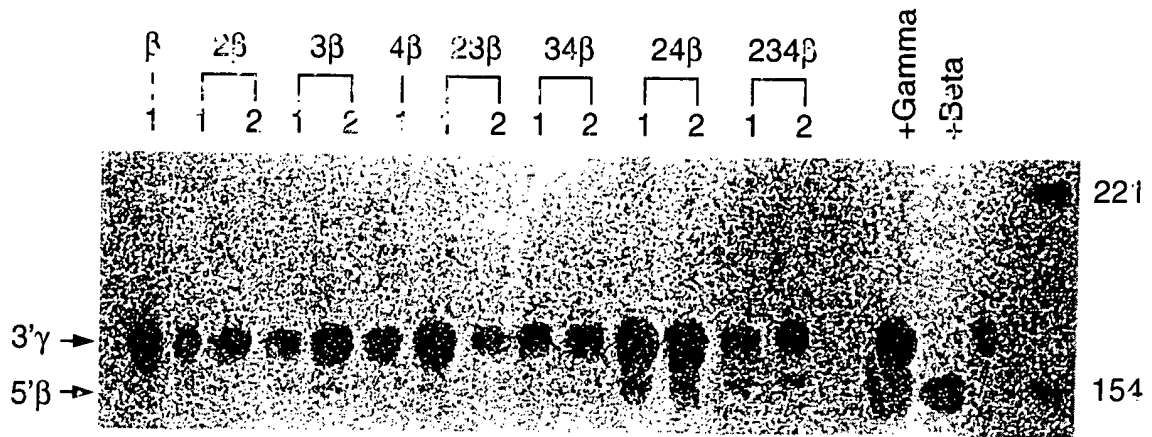


FIG. 4

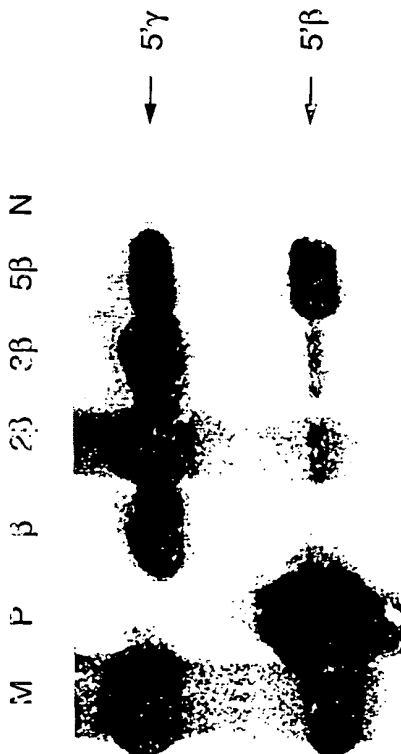
S1 analysis of K562 cells containing human β -globin on an EBV based vector



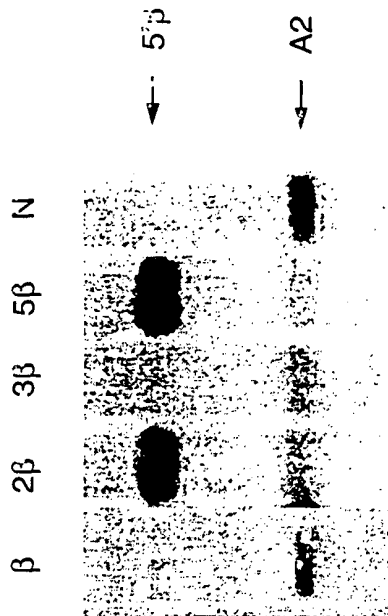
Application No.: 09/247,054
 Title: Self-Replicating Episomal Expression Vectors Confering
 Tissue-Specific Gene Expression
 Inventors: Michael Antoniou and Franklin G. Grosfeld
 Docket No. CACO-0045 Date of Filing: February 9, 1999
 Atty: Doreen Yanko Trujillo Telephone No. (215) 568-3100

FIG. 5

A. K562



B. HeLa



Application No.: 09/247,054
 Title: Self-Replicating Episomal Expression Vectors Conferring
 Tissue-Specific Gene Expression
 Inventors: Michael Antoniou and Franklin G. Grosfeld
 Docket No. CACO-0045 Date of Filing: February 9, 1999
 Atty: Doreen Yatko Trujillo Telephone No. (215) 568-3100

FIG. 6

